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THE SPENDTHRIFT CONFRONTED WITH THE BANKRUPT GOLDSMITH.

A WREATH OF SMOKE.

CHAPTER IX.

"AND now, Walter, for your story," exclaimed Lilly.

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As I had expected something very tragic and dull from my solemn-looking cousin, I was certainly rather astonished when Mr. Temple commenced reading the piece of his composition.

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DEBTORS AND DUNS.

"Now really, Alek, this is too bad—up in town again—not a week since you were here last. What will my uncle say to your passing all your time in a railway train?"

"Not quite all my time, Coz; I find a little leisure for hunting, and the billiard-table, and the opera," replied the dashing young Oxonian, playing with his slender cane, and looking as though he had come into the world for nothing but to enjoy himself.

"But, Alek, I thought that the time for the examination was very near. This is not the way to qualify yourself for honours."

"Granted, Louis d'or; and yet, allow yourself not to suppose that I have altogether neglected my studies. Depend upon it, I could pass such an examination in any of the arts and sciences as would astonish the greybeards."

Louisa looked incredulous.

"Only try me; don't judge without hearing me," continued young Tiverton, assuming an air of injured innocence. "There, the music-stool shall serve you as a seat of judgment; you want nothing but spectacles to make you look decidedly venerable."

"Upon what shall I examine you?"

"Anything—say Natural Philosophy; I suspect that you know about as much of that as I do."

"I beg your pardon," replied the young lady, who had attended lectures at the Royal Institution.

"Oh, then we'll divide it between us; what is natural for me, what is philosophic for you."

"Let me see," said Louisa, with a pondering air; "better begin at the first elements of the science. Alek Tiverton, what is a simple body?"

"One who marries a gambler in hopes of reforming him. Now, learned Coz, I will ask you something in return: What makes a blue change colour?"

"An acid."

"Excuse me; it is, being asked a question which she cannot answer, by one more blue than herself."

"A hint to young ladies to drop Natural Philosophy, I suppose," said Louisa, turning round towards the piano. Are you equally at home with the arts as with the sciences?" and she ran her fingers lightly over the keys.

"The piano is my forte," replied her cousin.

"Is this new air that I am trying major or minor, Mr. Tiverton?"

"Major, I should say, as it has not become general!"

"Well," said Louisa, laughing, "I did not give you credit for being so profound a musician. But, Alek," she continued, in a graver tone, "in sober earnest, what brings you to London to-day?"

"In sober earnest, I wish to buy myself a watch."

"You had a new gold one not a year since; I don't believe that it is paid for yet."

"Don't inquire too curiously, as Hamlet, or Falstaff, or somebody says."

"I wonder that you have the conscience to contract so many debts."

"As Roger Bacon declared, before me, I never

contract debts; I do all that I can to enlarge them."

"Oh, Alek, this is no joking matter for the creditor, whatever the debtor may think. What has become of your splendid watch?"

"Why, watches, as some famous poet observes, are made to go; but they are not made to go a-hunting. Mine met with a little accident, got smashed, and instead of remaining a time-piece, went to pieces before its time."

"What will your father say?"

"Oh, I've written to Liverpool to my governor for cash; when that comes, all will be right; and by to-morrow nothing will be left."

"But it may be very inconvenient——"

"Coz," interrupted Alek, "do you see those two letters, D. C., at the end of your piece of music?"

"Yes, they mean——"

"I know their meaning; it is *don't criticise*; and there are two other letters a little further on, and they are D. S., *don't sermonise*;" and with that the young gentleman rose and took up his hat.

"Going so soon?" said Louisa. "Well, well, I wish that you were a little more prudent and steady, and wise enough to quit these follies, and try for a degree."

"Trust me, Louisa," replied her cousin, as he nodded her a playful good-bye at the door, "I have no doubt but that I shall grow wise by degrees; *mais c'est le premier pas qui coûte*."

"Poor Alek!" said Louisa to herself, as she heard his light curriole roll away, "one knows not whether to part from him with a smile or a sigh. Generous, light-hearted, ever ready to do a kindness, he yet inflicts more suffering, and is preparing for himself more regret, than many who appear to have heavier charges to answer. He parries remonstrance with a pun, and arguments with a jest; but life has its stern realities, and man cannot live always on flowers and froth. Poor Alek! a youth of trifling prepares for an old age of regret."

We will follow the curriole as it rolls down Portland Place, and into the crowded throngs of Regent Street. It is a bright spring afternoon, and all the world seems abroad. The golden sunshine streams from the right, leaving half of the noble vista in shade, but reflected on the other from shining panes and dazzling brass plates, sparkling and glittering on the articles of ornament and luxury which attract the eye from every tempting window, till melting in the distance into that dim soft haze, which so often rests like a veil upon the streets of old London, revealing so much of beauty to the eye, and leaving yet more to the fancy and imagination. The pavement is thronged with pedestrians; the man of business, hurrying on with impatient step, looking neither to the right nor to the left; the fop, with his spy-glass in his eye; the moustached foreigner, and red-capped oriental; the blind beggar, slowly tapping his way; and the lady, bent upon purchasing, who, giving all her attention to the gorgeous display in the shops which she passes, seems, like Hamlet, to find her way without her eyes! The road is crowded with vehicles of all shapes; the long, low, lumbering omnibus and the light safety-cab; here, the dashing barouche with the coronet

on its panel, must slacken its course for the high-heaped waggon, drawn by its four immense dray-horses; there rolls along the black police van, rapidly passed by the little post-cart, with its driver in scarlet; all seems life and bustle, gaiety and confusion—the current incessantly flowing, the scene always shifting, yet the stage ever crowded.

As Tiverton, who was rather a daring than a skilful driver, dashed on into this living sea, and attempted to make his way through its difficult navigation, he was obliged suddenly and violently to rein in his horse, to avoid collision with a cab, which was driven at a rapid pace along Oxford Street. The animal fell back almost upon its haunches, and a cry of pain or terror from behind the curriele announced that some mischief had been done. Tiverton saw that the passengers paused, their eyes attracted to the spot; then two or three came forward, and raised from the ground a poor little girl, who had been knocked down by his vehicle while attempting to cross the street. She was not crying, but looked pale and frightened; her bonnet was crushed, and she moved as though in pain.

"I hope and trust that you are not much hurt, my poor child," exclaimed Tiverton, feeling in his waistcoat pocket for his purse.

"Not much—only my foot; and——" she looked with an expression of distress at a large volume which she had been carrying, and which was much torn and soiled by the accident.

Tiverton found the purse, and felt likewise that it was quite empty; he bit his lip in vexation.

"I'll take you home in the curriele; here, mount!"

"Oh, sir," expostulated the child; but the young gentleman insisted; and the next minute the little girl was beside him, still clasping her injured book.

"Where shall I drive? Where do you live?"

"Buckingham Street, sir; no, but I never thought, sir——"

Tiverton turned his horse; he had a warm and generous heart, and felt a kindly interest in the pale delicate girl at his side. Her manner seemed to denote that she had seen better days, while the thin emaciated form and well-patched habiliments told that the gripe of poverty had been heavily laid upon the youthful sufferer.

"I fear that that volume has been quite spoiled. Is it one that you value?"

Tears sprang to the eyes of the child; Tiverton could scarcely catch her words as she replied: "It was my mother's, given to her when she married; we have so often read it together, that it was like an old friend."

Tiverton stooped to look at the volume, and observed that it was a large old edition of the "Pilgrim's Progress."

"Well, we must tell your mother how this occurred, and"—he stopped, arrested by the expression in the blue eyes of the child; her pale lip quivered, and she said in a trembling voice, "My mother is in heaven!"

There was a short silence, which the girl was the first to break. "I read to her from that book the very night that she died; I read to her of Christian passing the river."

"I am sure that you must value that book

greatly; I heartily regret the injury which it has sustained. Were you taking it to be re-bound, my child?"

"No, sir, I was taking it to the pawnbroker's," faltered the little girl.

"The pawnbroker's! what, the volume that you think so precious?"

"Oh, sir, what can I do? There's rent to be paid, and food to be bought, and father's eyes are dim, and his strength going, and we cannot pay for a doctor. He is more to me than all besides; and oh, if I should lose him as I lost my mother!" The flood-gate of sorrow was opened, and tears coursed each other fast over the pale cheeks of the motherless child.

Tiverton, for the first time in his life, felt the real value of money. He actually regretted the two guineas which he had expended that morning upon his pair of fashionable boots; but he thought with hope upon the letter and remittance which he was expecting from Liverpool.

They stopped at the door of the child's lodging. "I should like to see your father," said Tiverton, as he gave the rein of his horse to a youth who was standing near; "do you think that he would object to a visit from a stranger?"

"Oh! no, sir; he would be very glad; but it's such a poor place! Father once was in a very different home; he had a good shop of his own—that makes him feel it more, and he can't bear to ask"—she was interrupted by the door-bell being answered by a slipshod woman, with a repulsive countenance, who stared in wonder at the unwonted apparition of a well-dressed gentleman.

The child led the way up the narrow dirty stairs, whilst Tiverton pursued the conversation.

"Your father had a good shop of his own, you say: how came he to be so much reduced in circumstances?"

"He failed, sir; but it was no fault of his. He had so many bad debts. Gentlemen called, and gave orders, and forgot to pay; and when father sent up his bill, they were angry, or took no notice. Oh, it was a weary thing, day after day, to hope and hope, and always be disappointed, and to have to beg our own creditors to wait a little longer, till they too were tired of waiting. I wonder how great folk can be so cruel!"

They had now arrived at the top of the stairs; the child timidly opened the door of an attic room, and introduced the stranger with the words, "Father, here's a gentleman come to see you."

Seated on a broken chair, which formed almost the sole article of furniture in the miserable garret, appeared a man with grey hair, and a brow marked with long deep furrows; but it was not the hand of Time alone that had frosted the hair, or traced the wrinkles. There was an expression of stern hopeless gloom on his thin features and in his half blind eyes. He raised his drooping head as he heard the sound of his daughter's entrance, and Tiverton started as he recognised the countenance, altered and aged indeed, but still familiar, of Gashley his watchmaker. It was a relief to the young man to find that the failing sight of the unhappy bankrupt prevented the recognition from being mutual; he felt like a criminal in the presence of his accuser.

The child gently glided up to her father, and, placing her hand on his, repeated the words, "Here's a gentleman come to see you."

"Why should a gentleman come to see me?" said Gashley, in tones so strangely altered, that they led Tiverton at first to doubt whether he had not been mistaken in the watchmaker's identity; "the gold is gone, and the silver is gone; there is no more for them to take, or for me to lose, and the swallows fly not back when the bleak winter comes."

The piteous glance of the poor child confirmed the terrible suspicion which harrowed the soul of Tiverton, that the mind of the sufferer had been warped by sorrow.

"Dear father," said the girl, soothingly, "you are mistaken. This is a kind gentleman; he pities us, and he comes to help us."

"I ask not pity, I ask not help," cried the watchmaker, striking his clenched hand upon his knee; "I demand only justice! I ate not the bread of idleness, I lived as an honest man, wronging no one, begging from no one; had I also trusted no one, I had not been the ruined bankrupt that you see before you."

Tiverton sighed deeply: he could not utter a word to comfort or to soothe; the stern realities of life were before him; truth might no longer be parried with a jest; the thoughtless child of pleasure must look on his victim, and contemplate his own work. Silent he stood, as with wild and increasing energy Gashley proceeded: "A man, a poor man, once dashed his hand through my window, and seized some of the watches which hung there; he was pursued, overtaken, coupled with felons, tried, condemned, and, judged unfit to breathe his native air, he was transported: he was a thief, and his punishment was just. But the man who comes in the garb of a gentleman, who is welcomed when he enters, and thanked when he departs; who displays to the world the property not his own; who rolls in his carriage while his creditor may be pining in a cellar; who feasts with gay companions whilst his creditor may be wasting with hunger; what is he but a thief—a heartless thief—a treacherous thief—and what should his punishment be?"

The little girl saw the expression of pain on the countenance of Tiverton. "Excuse my poor father," she half-whispered, "he never used to speak so; it is only misery that has made him thus." To see her gushing tears was yet more intolerable than to hear the wild reproaches of her unhappy parent. Tiverton could endure neither: again he instinctively felt for his empty purse; then hastily promising that he would come again, come soon again, and with abundant supplies of everything that the poor sufferers could require, Tiverton quitted the garret and rushed down stairs and out of the house; it seemed as if its atmosphere would suffocate him. He sprang into his currie, and lashed his horse to furious speed, as though he could leave behind him with the creditor whom he had injured, the sting of an accusing conscience which that creditor had planted in his heart. His only relief was in the thought: "I will pay him now; I will pay him four-fold; were I to live on bread and water for it, not one day longer should that debt rest upon my soul."

EMINENT CHEMISTS.

DALTON.—PART II.

DALTON furnishes a rare example of what a strong will and a vigorous intellect, when they co-exist, can do. He was the son of a Cumberland weaver—a very poor weaver, earning only a scanty subsistence by weaving common country goods, while his wife eked out the scanty income by selling paper, ink, and quills. The poor weaver, however, did not neglect the education of his son. He taught him at first himself, paying to mathematics especial attention. Subsequently, young John Dalton was sent to school under the charge of Mr. Fletcher, a member of the Society of Friends, to which community the Dalton family belonged. John Dalton here remained until about twelve years old, when he set up as schoolmaster on his own account, furnishing an early proof of that energy and self-reliance so conspicuously brought out hereafter. It was, however, a winter school only. His father, at this time, had given up weaving, and become farmer. He was poor, and the dutiful schoolmaster helped him during summer time to labour in the fields. Many Cumberland boys were situated like the Daltons, learning in winter time, and working during the remaining portions of the year on their respective farms. A boy of twelve years may have the materials for teaching in him, but he will find it hard work to maintain order amongst boys of his own age. John Dalton experienced this; some of his pupils, it is affirmed, would neither be silenced nor commanded, but challenged the schoolmaster out to have a stand-up fight. The great man's biographers do not say whether he accepted the challenge.

Our philosopher occupied himself in this winter school for about three years, which brought him to the age of fifteen. This period is marked by Dalton, in a letter to a friend, as constituting an era in his life; for then occurred, what seemed to him a remarkable event. Dalton, when on a visit at Cockermouth, saw an umbrella. He bought it, and felt himself (to adopt his own words) "becoming a gentleman." This little incident ought not to be omitted from a biographical sketch of Dalton's life. It shadows forth two traits of character ever conspicuous in him—dry quaint humour and simplicity of tastes. He now, at the age of fifteen, began to act as the usher of his cousin, George Bewley, who kept a school at Kendal; and here his own real education commenced. Providence threw him in the way of the blind mathematician, Gough, to whom Dr. Whewell and other great mathematicians are indebted for their early training, and whom the poet Southey has commemorated in the following beautiful lines:—

" Methinks I see him, how his eyeballs rolled
Beneath his ample brow, in darkness pained,
But each instinct with spirit, and the frame
Of the whole countenance alive with thought,
Fancy, and understanding; whilst the voice
Discoursed of natural or moral truth,
With eloquence, and such authentic power,
That in his presence humbler knowledge stood
Abashed, and tender pity overawed."

Ultimately, Mr. Bewley gave up the school, which was continued by the two brothers Dalton, John and George. To begin housekeeping was

hard work for the brothers. Their means were small, and the necessities of furnishing pressed hard upon them. Nevertheless, what with the assistance of Mr. Bewley, and seven guineas lent them by the old people, to be repaid "9 mo. 29," and which was paid only a week after time, and thirteen shillings and sixpence thrown into the common fund by kind sister Mary, who acted as housekeeper, and in respect of whom our philosopher's journal bears the expressive testimony of "Mary, in part, £0 0s. 6d."—the first difficulties of housekeeping were overcome. The brothers Dalton may be said to have succeeded in their school, notwithstanding that the average income derived from tuition was only £70 per annum. This scanty pittance was eked out by drawing conditions, collecting rents, making wills, and searching registers, all of which brought them, on an average, about £5 per annum more.

But the life of a village schoolmaster afforded a too restricted scope for a gigantic intellect like that of John Dalton. He yearned for a profession more congenial to his tastes, and thought of either becoming a barrister or entering the medical profession. Happily for science, and for himself too, he did neither: what is erroneously called a casualty proved the turning-point of his scientific destiny. In the year 1793, Mr. Barnes asked Mr. Gough to recommend a suitable teacher for mathematics in the New College of Manchester. He recommended Dalton, who was accordingly elected. He lived in the establishment, and taught mathematics for six years, publishing during this time his "Meteorological Observations and Essays."

In 1794, Dalton became a member of the Literary and Philosophic Society of Manchester, inaugurating his connection with that learned body by reading a paper on "Extraordinary Facts relating to the Vision of Colours." The fact is, Dalton was a subject of the peculiar visual defect to which the term of *colour blindness* has subsequently been given. He did not see colours as people usually see them. "I can," says he, "see two, or at the utmost three, distinctions in the solar spectrum; these I should call yellow and blue, or yellow, blue, and purple. Yellow and blue make a contrast to my eyes; blue and purple differ more in degree than in kind. Pink appears by daylight to be sky-blue, a little faded; by candle-light it assumes an orange or yellowish appearance. Crimson appears muddy blue by day; and crimson woollen yarn is much about the same as dark blue. Red and scarlet have a more vivid and flaming appearance by candle-light than by day-light. To me there is not much difference of colour between a stick of red sealing-wax and grass by day. Dark green woollen cloth seems a muddy red, much darker than grass, and of a very different colour. Coats, gowns, etc., appear to me frequently to be badly matched with linings when others say they are not. On the other hand, I should match crimson with claret or mud; pinks with light blues; browns with reds, and drabs with greens. The colour of a florid complexion is dusky blue." Dusky blue for a complexion!

The affection of colour blindness has been noticed by Dalton's biographer, Dr. Angus Smith, as perhaps supplying a key to some of that great philosopher's traits or peculiarities, especially the

dogged persistence wherewith he advocated views based on evidence unperceived or incomplete to other people. Dalton's character was deficient in idealism. He was an indefatigable hunter after facts—*truths*. Adopting these as a basis, he arrived at deductions which had been heretofore mere poetic dreams begotten of ardent fancies; thus affording another example of the frequently noticed fact, that the fictions of poets and ideal speculations, however wild they seem, are often the shadows of truth unseen as yet, but slowly advancing towards the goal of discovery. An engraver on copper, affected with colour blindness still more completely than Dalton—only being able to distinguish in the varying tints of colour, gradations of white and black—testified that he considered the affection an advantage. He was not subject to the difficulty of being able to decide on the amount of whiteness or blackness of which each tint of colour should be rendered in the engraving. May not the colour blindness of Dalton have imparted increased tranquillity and power of concentration of other faculties? May not the field of his intellectual excursions have been rendered more free from obstacles, in proportion as his sense of vision was narrowed? Might not the sum of intelligence remaining to him have been increased by the extent of the amount taken away? "It would probably explain many strange occurrences," writes Dalton's biographer, "if we were to consider that there are really persons in the world who see all crimsons as 'dark blue' or 'a muddy blue,' and who would match crimsons with claret or mud, pinks with light blues, browns with reds, and drabs with greens; who see the healthful tints of a florid complexion to be like 'dilute black ink on white paper,' or 'a dull opaque blackish blue upon a white ground.' How many strange mistakes and visions might be accounted for by this defect of sight! A fair face with glowing veins would be to Dalton as a corrupting corpse!"

Nevertheless, Dalton was not insensible to human and to female beauty. Though he never married and never courted society, he was not, like Cavendish, a misanthrope. If he did not court society, he did not flee from it; and if he did not shine in general conversation, he was a good listener. His letters are a fount of kindly sentiment and droll humour. He has been called penurious, but during the greater part of his life he worked hard and remained poor. He gave £50 towards building a chapel at a time when he had little to spare; and he held forth the helping hand of charity on many proper occasions. He was awkward in manner, and his voice was harsh; perhaps, conscious of these defects, he did not court society. But is not courting social intercourse to be imputed as a fault to one who felt the span of life already too short for the maturing of his researches—one who made upwards of two hundred thousand meteorological observations, and experiments innumerable—one who taught much, wrote much, and worked in the fields—one whose mind must have been roaming amidst the atoms, who penetrated into the immensity of created particles and weighed them as in the scales, though he could not see them?

The desire to become and remain independent

was a fine trait in the character of Dalton. His becoming schoolmaster at the early age of twelve was a proof of it, in boyhood. In manhood, he gave still further proof, by refusing an offer which many in his position would have readily accepted. A gentleman, who entertained sincere respect for Dalton's scientific talents, and fearing lest the *res angustæ* would impede his pursuits, offered him apartments, complete independence of action, a laboratory, and £400 per annum. The philosopher respectfully declined. He feared to compromise his independence.

In the year 1804, the fame of Dalton as a philosopher had become so widely spread, that he accepted an invitation to deliver a course of lectures in the Royal Institution of Great Britain. Davy (then Mr. Davy) was professor of chemistry there—a young man then, a man of elegant manners, and somewhat vain. Dalton was the reverse of all this. Davy, fearing that the unstudied manners of the great philosopher would leave a disagreeable impression on the minds of an audience so fastidious as that of the Royal Institution, advised him to write his first lecture carefully. What followed shall now be told in Dalton's own words. "I studied and wrote," said he, in a letter to Mr. Johns, "for nearly two days; then calculated to a minute how long it would take me reading, endeavouring to make my discourse about fifty minutes. The evening before the lecture, Davy and I went into the theatre; he made me read the whole of it, and he went into the furthest corner; then he read it, and I was the audience." Who would not like to have seen the two great philosophers thus engaged? The first lecture went off satisfactorily, and Dalton's self-confidence was complete.

Dalton's lectures at the Royal Institution were much admired for their philosophy; but the philosopher's manner gave rise to comments and pleasantries; amongst other things, a laugh was raised against him for calling the elementary bodies, oxygen, hydrogen, etc., "these articles," speaking of them, it is said, with far less enthusiasm than a linen-draper would have spoken of the articles on his shelves. Dalton was now for a time absorbed in the vortex of fashionable club-life. This was not to his taste, but it was kindly meant, and he did not avoid it. Too often his abstractions caused him to forget the time, and to arrive when dinner was over, when he would repair to the nearest eating-house and supply his wants, duly recording what he had for dinner and what he paid for it. The boiled-beef shops which furnished him with a dinner and beer for 11½d. were his admiration; but he complains harshly of having had to pay, on one occasion, eighteenpence for a basin of soup—no more than a pint.

In many respects the stamp of Dalton's character was like that of Cavendish. The same mathematical turn was common to both; the same unpolished manners and uneasy address. Both were self-reliant; each trusting more to his own deductions than to the opinions of others. But Dalton possessed a genial love of humanity which Cavendish had not, and a fund of quiet humour to which the latter was a total stranger. Neither married: Cavendish, because he hated woman-kind; Dalton, as he playfully observed, because

he could never find time. If one of Cavendish's female servants ever chanced to meet him, she was discharged forthwith; and when one morning, during a walk, he helped to protect a lady from the attacks of a bull, people marvelled that Cavendish had not fought on the bull's side. But Dalton was fond of the society of ladies: the memory of a lady, too, was painfully blended with thoughts of his early life. He held a letter written in a female hand. It had been addressed to him as a youth, but he often read it when stricken in years. He never told its contents, nor allowed any strange eye to gaze upon them: but as often as he read the letter, he would shed tears. The Corypheus of atomic philosophy was not moved to tears by a trifle, depend upon it. Even when in London, delivering lectures at the Royal Institution, he could unbend enough to furnish Mrs. Johns with a notion of London fashions. "I should tell Mrs. J. something of the fashions here," he writes to Mr. Johns; "but it is so much out of my province, that I feel rather awkward. I see the *belles* of New Bond Street every day, but I am more taken up with their faces than their dresses! I think blue and red are the favourite colours. Some of the ladies seem to have their dresses as tight round them as a drum, others throw them round them like a blanket. I do not know how it happens, but I fancy pretty women look well anyhow." When we reflect that a lady's face must have seemed to Dalton sky-blue, and her ruby lips purple or mud colour, he must have been very far from a woman-hater to have thought them pretty.

Our sketch of Dalton's life would not be complete without stating the circumstance which first led him to be intimate with the Johns family. In early life Dalton had been acquainted with Mr. Johns, but not intimately. Mr. Johns having married, happened to be living in Manchester when Dalton came to that city. Dalton passed the house of the former daily. In the autumn of 1804, Mrs. Johns casually meeting Dalton, asked him why he never called.

"I really don't know," was Dalton's reply; "I will come and live with you if you will let me."

He did come, occupying the only spare bedroom, and sitting with the family. In this new home Dalton remained in the greatest amity for six-and-twenty years. This brings us up to the period at which our sketch commenced. Honours now flowed in on him apace, always unsolicited. He was not insensible to them; but they always remained external to him, never altering his simple tastes, or otherwise altering his manner. In 1834, he was presented at court. He did not court that honour, neither did he churlishly retire from it. On this occasion, as formerly, when Dalton lectured at the Royal Institution, his friends thought he would require training and rehearsal, the better to enable him to act and move with grace in the presence of majesty. He was therefore taken under discipline, like one who had to accomplish a feat. A question now arose of some importance. In what costume was Dalton to be presented? A Quaker decked in court dress, and girded with a sword! Horrible! A friend suggested that the presentation had better be made in the scarlet robes of a D.C.L. Fears were still entertained lest Dalton might think that guise too

conspicuous; but Mr. Babbage, who seems to have managed the diplomacy of the business, did not find him intractable in matters of innocent form. So it was agreed that he should present himself before royalty in the scarlet doctoral gown, the colour of which, as Dalton was colour blind, would not seem a very demonstrative tint. The man who considered red sealing wax to be of the colour of grass, would not, after all, be dazzled by the colour of a red robe. In the preliminary course of drilling which Dalton underwent, the friend who personated royalty detained the presentee only for a moment: he had therefore but two points of rehearsal left—to gather up his robes, and to retire as gracefully as might be.

Fortune, it is said, proved treacherously kind to Dalton on the presentation day. The trumpet blast of fame had preceded him. Somebody, in reply to a royal question, intimated something about the man in red. The king, finding that he had to do with no ordinary individual, contemplated Dalton's face longer than a moment. Provision for this contingency had not been made in rehearsal. Dalton thought, as some people aver, that the king waited to be spoken to; and Dalton is said to have bid the king good day, and asked him how he did. Another version of the tale is, that Dalton, instead of passing on, stood so long before his Majesty, that the latter was embarrassed—wishing to be civil, yet knowing not what to say. This much is clear—Dalton's true place was not in any gay throng of worldly splendour.

Dalton was now growing old, full of honours, and in the enjoyment of comparative wealth. He had been placed on the civil list as a recipient of £300 per annum, and he had succeeded to a small patrimonial estate. His industry had not diminished; but the subtle penetration which characterized his younger days—that genius, in short, of which the atomic doctrine was the fruitage, had paled and grown dim. Industry and energy both remained, but they did not suffice to increase his fame. Dalton had never been a great reader; on the contrary, he objected to book lore, and boasted that he could carry on his back all the books he had ever read. This boast was an index of his leading characteristic—self-reliance on individual deductions. In a matter so little handled as the doctrine of atoms, this peculiarity might have been an advantage. In Dalton's own brain, the ideas of atomic constitution were harmonious and defined. External to the domains of his intellect, all on that subject was discordant and chaotic. Perhaps he did well to close his senses against the confusion. The composer of music, who lives in a city where discordant sounds prevail, does well to seclude himself, and trust to his own perceptions. But he would be a foolish composer who, living in a grove, amidst the warbling of birds, should close his senses to their influence. Dalton was an honest, bold, and self-reliant man. Whatever he attempted, he preferred to attempt alone. To be honourably independent was the maxim of his life—its spring, its motive force. This is an honourable sentiment: few men have it in excess. But even a sentiment, good intrinsically, may be unduly developed. Perfection of human character is the result of a balance established between faculties, not of the expansion of one. Dalton's

negligence, his contempt almost of the labours of others, made him perhaps a greater genius, but a lesser man. His self-reliance partook of the nature of pride; and pride, like other faults, prepares a scourge for itself. Dalton's small reading was the cause of his sometimes appearing in the character of a plagiarist, though quite unwittingly. He accomplished some discoveries which had been discovered before—things great and wonderful, considered as the fruits of mental exercise, but of a by-gone age.

The doctrine of atoms which he had given to chemists was an agent of tremendous power—an engine wherewith the rocks of crude knowledge could be moved and shattered, and their gems of truth laid bare. These rocks of knowledge had already been chronicled in books, as rocks and quicksands are depicted on geographic charts. Dalton, like a traveller rich in instruments, but ignorant of geography, knew not where to find them. Other travellers borrowed his tools, shattered the rocks, and unmined the gems. To develope and unravel the laws of atoms was to realize the brightest philosophic day-dream of modern times—a great and memorable work. The later efforts of Dalton were less happy. He failed chiefly because he knew not what others had done; thereby furnishing a proof, were it required, that a single human intellect, the brightest and the clearest, is a weak and limited thing. As Dalton grew older, he overrated his powers. A paper of his, sent to the Royal Society, and rejected, first aroused in him the suspicion of this fact. On the returned paper Dalton wrote a few words, which have the force of an epitaph: "I sent the account of the Phosphates and Arseniates to the Royal Society. It was rejected. Cavenish, Davy, Wollaston, and Gilbert, are no more."

On the 18th of April, 1837, he was seized with an attack of paralysis, from which he never quite recovered. On February 15th, 1838, he was attacked again; but rallying, he still talked of science; and speaking of a scientific man whom he had seen in France, he said, "Ah! he was a wreck then, as I am now." His end was near. On May 27th, attempting to rise from bed, he fell on the floor and died. Whether his last hours were cheered by the hopes of immortality, founded upon the finished work of the gracious Redeemer, the writer does not know. How gladdening it is to see those who are great in talent or in achievement, equally distinguished for their faith and for their devotedness to the Father of spirits; while the reverse of this is especially painful to every one who duly weighs the solemn and enduring realities of eternity against the evanescent distinctions of time.

THE TRAVELLER IN CHINA AND CHINESE TARTARY.

THIRD PAPER.

THE plausible reason assigned by Ki-Chan for the expulsion of M. Huc and M. Gabet from the Thibetan capital, was the apprehended displeasure of the emperor, should he suffer two Europeans to propagate Christianity in any part of the country under the imperial sway. Before their departure,

the ambassador drew up a report of their affairs, and which, before despatching it to Peking, he submitted to them for their approval. It was a meaningless document enough. After reading it to them, he asked, "Does this report please you? Have you any fault to find?"

M. Huc replied, that he had an important observation to make—important not to himself and his companion, but to Ki-Chan; and requested him to dismiss his suite. This for some time the Chinese grandee refused to do, stating that it was forbidden by law that mandarins should converse privately with foreigners.

"In that case," said M. Huc, "I have no more to say. Send the report as it is; but if harm result, you have only yourself to blame."

The ambassador became thoughtful, took pinch after pinch of snuff, and at last desired his suite to leave him alone with the two Frenchmen. When everybody had left the room, M. Huc resumed: "You will now learn why I would speak to you in secret, and may judge whether or no we are dangerous men."

Ki-Chan turned pale, and looked disconcerted. "Explain yourselves," said he; "let your words be white and clear."

"In your report, you make me leave Macao with my colleague, Joseph Gabet; but I did not enter China till four years afterwards."

"Oh! if that is all, it is easily corrected. At what period did you enter China?"

"In the twentieth year of Tao-Kouang" (1840).

Ki-Chan took up his pen and wrote in the margin. "What moon?" asked he.

"Second moon."

Ki-Chan laid down his pen, and looked fixedly at M. Huc.

"Yes, I entered the Chinese empire at the time I have stated. I crossed the province of Canton, of which you were then viceroy. Why do you not write that, since you must tell the emperor the whole truth?"

The brow of Ki-Chan contracted.

"Do you now comprehend why we wished to speak to you in private?"

"Yes; I know the Christians are not wicked. Does any one here know of this affair?" he asked, in a tone of alarm—he having already once suffered degradation, confiscation, and banishment at the hands of the emperor, and well knew that another fit of imperial displeasure would probably cost him his life. Assured that no one was aware of the circumstance of his former official negligence, Ki-Chan took up his report, tore it, and composed a new one, in a style of pompous eulogy, and in which all tell-tale dates were omitted.

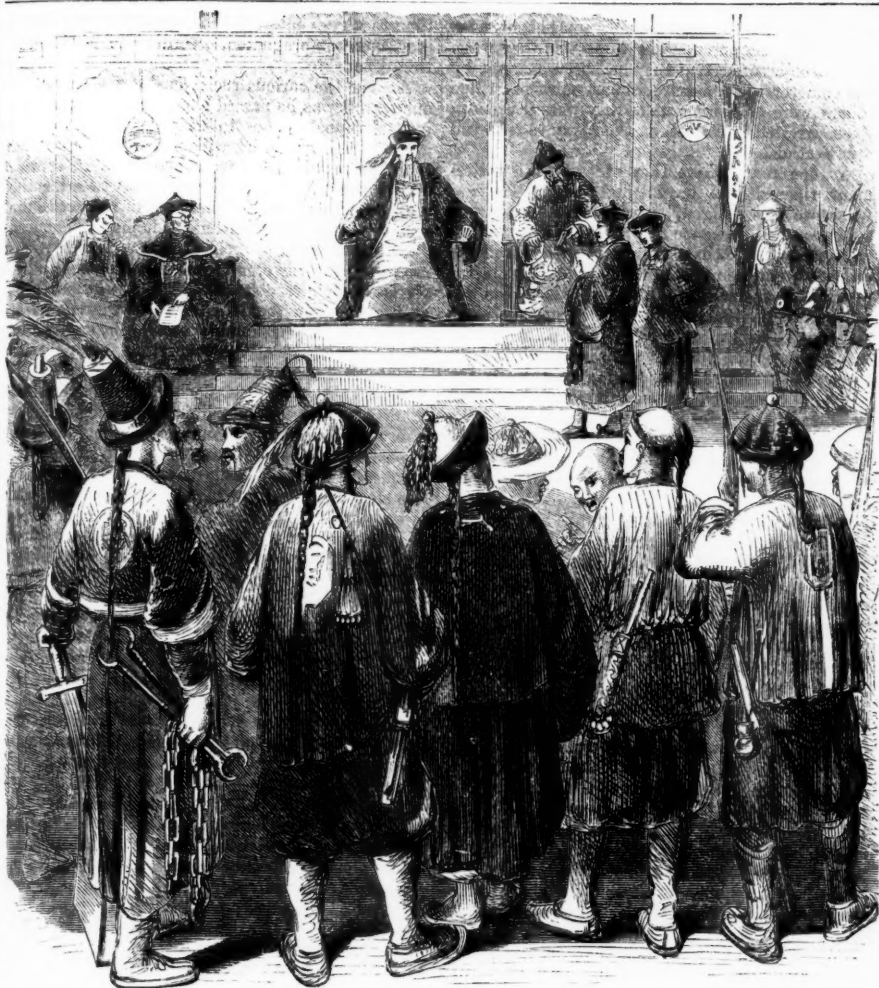
The charge of the escort, furnished partly by the regent and partly by the Chinese ambassador, was intrusted to a mandarin, named Ly-Kono-Ngan, Pacifier of Kingdoms, who, having reduced himself to a state of premature old age by brandy-drinking, was permitted to retire from public service, and return home to the bosom of his family. During his residence at Lha-Ssa, he had married a Thibetan female, and, being unable by the law to take her with him to his native province, he publicly parted from her—the scene, as related by M. Huc, being a very singular one. As a mark of confidence, Ki-Chan intrusted to the

custody of the foreigners two chests filled with a portion of his private treasures, which he wished to have conveyed to a place of safety in China, against his own anticipated return.

The journey to the frontiers of China occupied about three months, and the principal incident of it recorded by our traveller is the death of Ly, the pacifier. The caravan being thus left without a chief, the dictatorship was seized on by M. Huc, who retained it until their arrival at a Chinese town, when a new mandarin, a Mussulman, was appointed. The corpse of the deceased mandarin was borne along in a coffin; and it illustrates one of the curious customs of the country to know that, on passing through a frontier town, the Chinese garrison happening to be under arms, they paid military honours to Ly-Kono-Ngan, exactly as if he had been alive, the soldiers all bending the knee, and crying out that the "poor garrison of Li-thang wished him health and prosperity!" On reaching Ta-Tsien-Lou, the Thibetan escort left, and returned to Lha-Ssa, bearing a letter of thanks to the regent.

At this point began M. Huc's travels in China proper, and under circumstances and auspices of a most extraordinary character. Though in some sense a prisoner, on his way to trial by the emperor's orders, he was privileged to journey with pomp and distinction, waited upon by mandarins, and guarded by a military escort. All this had been amply provided for by the peremptory instructions forwarded by the emperor's representative, Ki-Chan. At the same time M. Huc well knew, from his long and intimate acquaintance with Chinese functionaries, that his fate depended entirely, under God, upon the attitude which he should assume from the very outset. He was about to be brought into daily contact and collision with a class of men who, he says, he has always found "are strong against the weak, and weak against the strong. Once allow them to get the upper hand, and it is all over with you; but if you can only succeed in mastering them, you will find them ever after as docile and manageable as children." Such is M. Huc's photograph of mandarin character; and with exemplifications of such a representation his narrative abounds.

It was not long before the anticipated struggle began. The first subject of dispute was as to the mode of travelling—M. Huc demanding to be conveyed by palanquin, while the mandarins of Ta-Tsien-Lou wished to force him upon horseback. Energy and perseverance, however, won the victory. But a sterner contest was at hand. "After this first triumph," says our traveller, "it was necessary to revolt against the 'Tribunal of Rites,' on the costume that we were to adopt. We had said to ourselves, 'In every country in the world, and especially in China, clothes play a very important part in the affairs of mankind; and since we have to inspire a salutary fear among the Chinese, it is by no means a matter of indifference in what way we are to be dressed. We cast aside, therefore, our Thibet costume—the frightful wolf-skin cap, the checked hose, and the long fur tunic, that exhaled so strong an odour of beef and mutton—and we got a skilful tailor to make us some beautiful sky-blue robes, in the newest fashion of



THE TRIAL OF M. MUC AND HIS COLLEAGUE.

Pekin. We provided ourselves with magnificent black satin boots, adorned with soles of dazzling whiteness. So far, the aforesaid 'Tribunal of Rites' had no objection; but when we proceeded to gird up our loins with red sashes, and cover our heads with embroidered yellow caps, we caused a universal shudder among all beholders; and the emotion ran through the town like an electric current, till it reached the civil and military authorities. They cried aloud that the red sash and the yellow cap were the attributes of imperial majesty, allowable only to the family of the emperor, and forbidden to the people under pain of perpetual banishment. On this point the 'Tribunal of Rites' would be inflexible, and we must reform our costume accordingly. We, on our side, alleged that, being strangers, travelling as such, and by authority, we were not bound to conform to the ritual of the empire, but had the right of following our own taste and fancy. They insisted—they

became angry—they flew into a furious passion; we, meanwhile, remained calm and immovable, but vowing that we would never part with our red sashes and yellow caps. Our obstinacy was not to be overcome, and the mandarins submitted."

The Chinese are no exception to the people of other and even more civilized nations in their admiration of pomp and parade. It could hardly be expected that so singular a procession as that of our richly-robed Frenchmen, with their numerous attendants, could pass through their towns and cities without exciting a commotion. Hence we are not surprised to learn that a profound sensation was created wherever they journeyed—that the palanquin was besieged by curious natives—and that lusty blows were dealt in all directions by the soldiers, in order to clear a way for the party. Free criticisms were loudly expressed on the features and costumes of the distinguished strangers; but the sight of the cap and sash often produced

a magical effect—silence, blank amazement, awe, and whispered speculations as to who they were. Some conjectured that they had been charged by the emperor with an extraordinary mission; while others were of opinion that they were European spies, arrested in Thibet, on their way to trial and decapitation.

At one town where they stopped, the excitement ripened into an insurrection. "The inn where we were lodged," says M. Hue, "possessed a large and handsome courtyard, round which were ranged the chambers destined to travellers; and as soon as we were installed, our visitors began to arrive in such crowds that the tumult soon became deafening. As we had rather more desire to rest than to present ourselves as a spectacle for the amusement of the public, we endeavoured to turn them out of doors, by addressing to them a few words, accompanied by energetic and imperious gestures. The crowd was suddenly seized by panic terror, and set off as hard as they could run; and no sooner was the courtyard clear, than we had the great gate locked, for fear of a second invasion.

"But, little by little, the tumult began again in the street. A sort of murmur was heard among the crowd, and then the noise burst out again as loudly as ever. The worthy Chinese were determined to gratify themselves with a sight of the Europeans. They began to knock loudly and repeatedly at our great gate, and at last, by dint of violent shaking, burst it in, and the living torrent rushed again with impetuosity into the courtyard. The matter was now becoming serious, and it was evidently important to let them see who was master. By a sudden impulse, we seized a long and thick bamboo lying near, and the poor Chinese, imagining, no doubt, that we intended to knock them down with it, tumbled over each other in their haste to get away. We then ran to the door of the room occupied by our mandarin conductor, who, not knowing what to do in the riot, had hid himself; but as soon as we had found him, without giving him time to speak or even to think, we seized him by the arm, clapped on his head his official hat, and dragged him along as fast as we could run to the gate of the inn. Then we thrust into his hands the great bamboo, and enjoined him to stand sentinel. 'If,' said we, 'a single individual passes that gate, you are a lost man;' and, hearing us talk in this grand style, the poor man took it seriously, and did not dare to stir. The people in the street burst out laughing; for it was something new to see a military mandarin mounting guard, with a long bamboo, at the door of an inn. Everything remained perfectly quiet up to the time of our going to bed. The guard was then relieved, and our warrior laid down his arms and returned to his room, to console himself with some pipes of tobacco."

There are, it appears, other tokens and attributes besides those of costume and physique by which the nationality of an individual may be discriminated, namely, that of his peculiar odour. Many travellers have remarked on this novel circumstance; affirming that not only the inhabitants, but even the soil of a country, diffuses a characteristic odour, especially in the early morning, and which is more perceptible to a new-comer

than to a resident. The odour with which China is strongly impregnated, according to M. Hue, is that of musk.

Among the curious social customs observed by our traveller as he passed along, was that of erecting triumphal arches to widowhood and to virginity. When a girl will not marry, in order that she may better devote herself to the service of her parents, or if a widow refuses to enter the marriage state a second time, out of respect to the memory of her deceased husband, she is honoured after death with especial pomp. Subscriptions are raised for the erection of a monument to her virtue, to which not only all the relations, but even sometimes the inhabitants of the village or district where the heroine has dwelt, contribute. These arches are of wood or stone, covered with sculptures, sometimes very well executed, of flowers, birds, and fabulous animals. On the front is usually an inscription in honour of virginity or widowhood, as the case may be, while on the sides are engraved the virtues of the heroine in question. These arches, which have a very fine effect, are frequent along the roads, and even in the towns. At Ning-po there is a long street of such monuments, all of stone, and of a most rich and majestic architecture. The beauty of the sculptures has excited the admiration of all Europeans who have seen them; and in 1842, when our troops took the town, there was some talk of their carrying off these triumphal arches, and making with them a complete Chinese street in London. The intention, however, was wisely abandoned.

Instead of being lodged at public inns, our travellers were generally entertained most sumptuously at *koung-kouans*, or communal palaces, which are found all along the road, and are reserved for the use of the great mandarins when travelling on public service. Ordinary travellers are rigidly excluded from them. The maintenance of each of them in good order, and the making of preparations to entertain an illustrious guest, is confided to a Chinese family. The expenses are defrayed by the governor of the town. The *koung-kouans* of the province of Sse-tchouen, through which the early part of M. Hue's course lay, are especially renowned for their magnificence; and he and his comrade were not a little astonished, at first, to find themselves lodged in such lordly and luxurious abodes, and waited upon by domestics attired in rich silks. It was not always, however, that they were treated in accordance with the generous instructions of Ki-Chan; for not unfrequently the mandarins, with the intention of squeezing some pecuniary advantage out of them, would pinch them woefully in the commissariat department. The narrative is replete with examples of mandarin greed and chicanery; but in most instances, according to his own representations, they found M. Hue more than a match for them. Some of these contests and triumphs we may subsequently relate.

It was not without considerable trepidation that our travellers entered the fine capital of Sse-tchouen, as it had been intimated to them that here they were destined to undergo the ordeal of a fresh trial—with what result it was impossible to foretell. Some doubt, it appears, still existed

in the imperial mind, on the subject of their nationality, and the viceroy of the province was charged to clear up this difficulty. Their fate depended, under God, on the information which would be furnished to the emperor; and, by those about them, it was thought by no means improbable that they would be ordered to proceed to Peking. This momentous Chinese trial will, we think, be of sufficient interest to justify our giving a slight sketch of it.

Early in the morning announced for the trial, an immense crowd surrounded the tribunal. As the distinguished prisoners advanced, the way was cleared by soldiers armed with bamboos and rattans. Passing the great doors, they were ushered into a small waiting-room, from whence they could contemplate the movement and the sensation around. The mandarins who were to take part in the ceremonial arrived in succession, each with his suite of attendants. The swarming satellites ran backwards and forwards in their long red robes, and hideous peaked hats of black felt or iron wire, surmounted by long pheasant's feathers. They were armed with long rusty swords, and carried chains, pincers, and various instruments of torture, of strong and terrible forms. The preparations altogether were of the most formidable character, and seemed to be designed to affright the prisoners.

At length a startling cry, uttered by a great number of voices, was heard in the hall of audience, which was repeated three times. It signalled the solemn entry of the judges, who took their seats on the tribunal. A great door was then suddenly thrown open, revealing the full view of the court. Two officers, decorated with the crystal ball, at the same moment appeared, and summoned the accused to the scene inside. Twelve stone steps led up to the vast inclosure where the judges were placed: on each side of this staircase was a line of executioners in red dresses; and when the accused passed tranquilly through their ranks, they all cried out with a loud voice, "Tremble! tremble!" and rattled their instruments of torture. On reaching the middle of the hall, the prisoners were stopped, and eight officers proclaimed in a chanting voice the customary formula: "Accused! on your knees! on your knees!" The accused, however, remained silent and motionless. The summons was repeated with the same non-success. The officers with the crystal balls then attempted to force the accused into the desired attitude, which brought forth a remonstrance from M. Hue, addressed to the judges. An answer was anxiously looked for from the president, but he remained dumb. This functionary—the *pon-tching-sse*, or first provincial commissioner—glittering with the most superb costume and gorgeous decorations, and wearing a pair of immense spectacles, evidently sought to impress the strangers with awe, and give them an imposing idea of the majesty of the empire. After a very lengthened pause—during which the accused had begun to feel more at their ease, and to communicate with each other in a low voice—the president made up his mind to break his majestic silence. He began in a nasal, squeaking voice, to inquire concerning their nationality—their object in visiting China—and the masters who had

taught them to speak so correctly the pure Peking language.

After these few questions, the president called an attendant, and ordered him to bring a little casket, carefully enveloped in skins, and sealed in several places with large red seals. This was next opened with much solemnity, and its contents exhibited. These were found to consist of some letters and translations from Tartar and Chinese books, which had been left with Ki-Chan at his request, and which, with the greatest exactness, had been transmitted to the viceroy of Sse-tchouen. After concluding his examination of these articles, the president became silent and motionless as before; whereupon the public accuser, or inspector of crimes—a kind of attorney-general—began to speak. He was a wrinkled old man, with a face like a polecat, who had rocked himself about and muttered between his teeth while the previous conversation had been going on, and seemed annoyed at the turn it was taking. He now discoursed with great volubility concerning the majesty of the Celestial Empire and the inviolability of its territory; reproached the arraigned strangers with the audacity of their conduct; and then fired off a volley of questions, as to who had introduced them to the empire, with whom they had entered into relations, whether there were many European missionaries in China, where they lived, what were their resources, and other interrogations which savoured of impertinence. His tone and manner, too, were by no means in accordance with politeness and "the rites."

When he had exhausted his flow of impetuous eloquence, M. Hue replied: "We men of the west, you see, like to discuss matters of business with coolness and method; but your language has been so diffuse and violent, that we have scarcely been able to make out your meaning. Be so good as to begin again, and express your thoughts more clearly and peaceably."

These words, slowly and gravely pronounced, had the desired effect. The inspector of crimes was completely disconcerted, and was too confused to proceed; while whispers and significant smiles began to circulate through the assembly, and even the judges cast jocular glances at the attorney-general. The accused now, seizing their advantage, begged the president to continue the examination, and concluded their appeal with the complimentary remark that the "men of the west admired dignity and precision of language."

This compliment seemed to gratify the president, and he proceeded in a strain of great affability to pursue the investigation, and, among other questions, asked who had brought them to China, and with whom they had lodged. This inquiry they respectfully but firmly declined to answer, since any information on those points might compromise the safety of others.

"But you must answer!" interrupted the inspector of crimes, gesticulating violently; "you must answer! How else will truth be found in this investigation?"

"The president has questioned us in a noble and authoritative manner, and we have replied to him with simplicity and frankness. As for you, inspector of crimes, we have already said that we do not understand you."

The assessor of the left here cut short the dispute by handing to the Frenchmen a large sheet of paper to examine. It contained nothing but an alphabet of European letters coarsely drawn, probably part of the spoil of some suppressed Christian establishment.

"Do you know that paper?" asked the assessor.

"Yes; they are the twenty-four radical signs, with which all the words of our language are constructed."

"Can you read them? let us hear the sound of them."

One of the accused then gravely repeated his A, B, C; and, in the meantime, each of the judges drew from his boot—which in China often serves as a pocket—a copy of the alphabet, in which the pronunciation of every European letter had been given in Chinese characters. It would seem that this incident had been concerted beforehand. Every judge had his eyes intently fixed upon the paper, and doubtless promised himself to make in this one lesson great progress in a European language. The assessor of the left, keeping his eyes and the forefinger of his right hand fixed on the first letter, and addressing himself to one of the prisoners, begged him to repeat the letters slowly, and pause a little on each.

The prisoner, however, amused at the comic turn affairs were taking, stepped forward, and politely extending his alphabet towards the philological judge, observed: "I had thought we came here to submit to trial; but it seems we came to be schoolmasters, and you to be our scholars."

A peal of laughter shook the assembly, in which the solemn president, and even the inspector of crimes, participated. This terrible trial had been gradually assuming a less formidable and more amusing aspect, and this whimsical incident gave the proceedings the *coup de grâce*. An air of benignity began to reign around, and even the dreadful executioners looked less ferocious and unamiable. After some pleasant conversation, the president remarked that, doubtless, the accused had borne enough for one day, and that they would probably be glad of some rest. Thereupon the court rose, the arraigned made a profound bow, the judges departed, whilst the soldiers and satellites uttered yells that shook the foundation of the building—this being, it appears, the customary ceremonial on the entrance and departure of official personages.

Such was the termination of this extraordinary trial. It was considered eminently favourable by the spectators, and many were the congratulations which our travellers received as they retired from the hall. In the evening they were waited upon by many distinguished visitors. Two days afterwards it was announced that they would have to undergo another judicial examination before the viceroy, who would signify what had been determined respecting them. Towards noon, accordingly, two handsome state palanquins were sent to fetch them, attended by a brilliant escort. The viceroy, an aged man, with a countenance full of sweetness and benevolence, and a cousin and intimate friend of the emperor, received the strangers in his cabinet in a very gracious manner. The interview was extremely pleasant, and the result as gratifying as could have been expected. They

were to be honourably conducted back to Macao. During the conference, the viceroy kept his penetrating gaze fixed on the features of his visitors, as if about to take their portraits. He seemed greatly to admire their fresh and ruddy complexion, for he subsequently asked whether they had any medicine or recipe for preserving that florid hue of health. M. Hue replied that the temperament of Europeans differed much from that of the Chinese; but that, in all countries, a sober and well-regulated course of life was the best means of preserving health.

"Do you hear?" he added, turning to his mandarin attendants, and repeating emphatically, "in all countries, a sober and well-regulated life is the best means of preserving health." All the balls, red, blue, white, and yellow, bowed profoundly in token of assent. And even our readers may not find it unprofitable to repeat to themselves from day to day so useful a lesson.

PILCHARDS.

It is only a Cornish man, or at least a dweller on the Cornish coast, that knows the full signification of the word placed at the head of this article. We northerners know that a pilchard is a fish not quite so long as a herring, rather plumper and thicker in shape, and possessing a more racy and relishing flavour: in the condition of *fermaodes*, or, as the Cornwall people call them, fair maids, we have eaten them occasionally at the breakfast-table, or perhaps at lunch, by way of a whet to the appetite, and, the meal over, have forgotten them. Not so the poor dweller on the Cornwall coast; to him the pilchard is a benefactor who comes annually to his shores in shoals of hundreds of millions, to supplement his scantily-fed larder, by supplying him an agreeable relish for his own consumption, to give him employment in catching and preparing them for the export market, and thus to afford him a harvest both in money and in kind, which shall serve to fence off the hardships of winter and alleviate the sad condition of his lot.

Any one who has had the pleasure to spend a day or two at St. Ives during the pilchard fishery, must have witnessed an animated and characteristic spectacle; and he must have been blind indeed if he have not recognised the advantage derived to an extensive district from this annual bounty of the sea, and the grateful sense of the benefaction that is entertained by the recipients of it. For no sooner is the cry "Heva! heva!" heard in St. Ives—the cry by which the presence of the fish in the bay is announced—than it travels far and wide inland among the surrounding hamlets, farmsteads, and mining districts; and within a few hours there sets in towards the town such an influx of people, in all guises, as no other watchword could bring together. Carts, waggons, donkey-traps—everything that can be mounted on wheels—as well as trucks, barrows, baskets, bags, wallets, and receptacles of all kinds, balanced on heads or slung on backs or shoulders—all scamper off to the beach, there to bargain for the finny store which is to constitute perhaps their substitute for butcher's meat during the best half, if not the whole, of the ensuing winter. Happily, the

market is open to all; the very poorest will reap their share of the harvest; a few shillings will buy a cartload; a handful of coppers will fill a barrow or a sack; and the penniless creature who cannot pay even twopence for a hundred of them, is at liberty to walk into the water and gather up the dead ones, of which there are myriads floating about, for those who will be at the trouble of collecting them.

The season of the pilchard fishery lasts from the beginning of August, or even earlier sometimes, to the end of November: not that by any means there are pilchards to be caught during all that period; on the contrary, it will sometimes happen that the catches are few and far between, and that the season will prove an unproductive one—though that is a calamity not frequently recurring. Why the pilchards come to St. Ives in such countless numbers, and to St. Ives only—for nowhere else are they so plentiful—is a question which we must leave to the naturalists to solve. The men of the place do not trouble their heads about that; they know two things: first, that the fish will be pretty sure to come; and, secondly, that if they are not netted at once, they will be off again in quick time, and there will be no catch worth speaking of. Let us see how the fishery is managed.

On the top of a cliff that overlooks both the town and the bay stands a round white house, called the Huer's house. Here, as soon as the pilchard season is approaching, certain old hands in the trade, denominated huers (we have the same word in the phrase "hue and cry") take their station, and from dawn to dark maintain a vigilant inspection of the surface of the sea. Their business is to look out for the arrival of the fish, and to advertise the same by shouts and signals to all whom it may concern. A shoal of pilchards, or, in fact, of any other fish, is easily distinguishable from a height by the appearance communicated by their presence to the water, which turns of a reddish hue, like water over a shallow rocky bottom. If the huers did not detect this appearance themselves, the sea-gulls, who on such occasions congregate in tens of thousands, and literally darken the air, would soon call their attention to it; but, in fact, the Cornish huer is quicker than the far-sighted bird, and has signalled his comrades to the slaughter before the cormorant gulls have gathered to their feast.

When the fish have entered the bay, the seine boats, whose crews have long been ready for action, row cautiously round the shoal, being guided in their movements by signals and shouts through a speaking trumpet, from the huers on the height above. The boat pays out its seine, or drag net, as it goes: the lower part of the net, being weighted with bullets, sinks to the bottom—the upper part, being floated with corks, swims at the top of the water. In this way the doomed fish are inclosed in a wall of network, with a very slender chance of escaping. As the seines are numerous, and belong to different proprietors, regulations are in force restricting each company not merely to its own locality in the bay, but to the specified time for its operations, in order that all may enjoy an equal right.

The fish being inclosed in the seine, and thus penned in so that they cannot escape, a smaller

net, called a tuck, is now introduced, which, being made to include a manageable portion of the shoal, the ends of it are gathered into the seine boat, and the crew haul it in, pulling up the bottom as they proceed, so that the pilchards it has inclosed are contained in a huge bag net. From this they are dipped out in baskets into the large carrying boat by the crew, two of whom work each basket, and who have only to plunge their wicker vessels into the living mass and haul them on board, literally hundreds at a dip. In a few minutes the men are buried in pilchards up to the hips, and the boat is swayed on one side by the weight of the flapping, struggling, wriggling mass. They pause for a few minutes to right their vessel by an even disposition of the load, and then to work at the dipping again with redoubled energy, till the boat is loaded almost to the water's edge, and will hold no more. As she pulls off to land, her place is taken by another, without a moment's loss of time; and thus the deadly game goes on till the seine is drawn close up and emptied; or till the allotted time is up, and the proprietors give place to others who are waiting and entitled to succeed them. The scene of operations all this time is one not easily described. The noise, the excitement, the rapid action, the sturdy bearing of the men—the tremulous ripple of the sea, alive on every point of its surface with the agonizing victims—the clamour of the multitude on shore, where hundreds of poor lads and women, floundering on the beach or half immersed in the water, are dipping and raking and grabbing on their own account. The roaring and shouting and laughter of the lads and lasses at their work, answered by the hoarse screaming of the dense flocks of gulls aloft—all together make up a babel which is almost as confusing to a stranger as the fishery is novel and interesting.

The carrying boats, being deeply laden, cannot come very close to the shore, and in order to unload them men march into the water up to their waists, carrying baskets on their shoulders. Into these baskets the fish are shovelled by the crew with a kind of wooden scoop, and this operation is going on from a round number of boats at a time, while others, heavily laden with fish, are waiting their turn. When a fish-porter's basket is full, he wades to the shore and empties it into a gurry, a species of barrow without wheels, not exactly like a sedan-chair, but carried in a somewhat similar way by two men. Following one of these guries, in the track of several others, along a part of the beach and through some narrow fishy passages, we come to an assemblage of queer buildings with their entrances wide open, and whence issues a very decisive saline and piscine odour, and a sound which not only resembles, but is a veritable confusion of tongues. These buildings are called the fish cellars, and here the gurry-bearers discharge their loads in huge heaps, returning, as they came, at a trot, for new burdens.

The fish-cellar is a large low chamber, occupied by young girls, women, and boys, in no very dainty garb, all busily engaged in what is called getting the fish into bulk. This is a simple process enough, but it has to be managed with some care and dexterity, or the work would have to be done over again. Those skilled in the business are

waited upon by the younger girls and boys, and thus the work proceeds with astonishing rapidity. It consists in piling the fish in large compact heaps, and in placing a layer of salt between each layer of pilchards. The outside rows of fish all lie with their snouts outwards, and when the pile is complete all that is visible are their pointed muzzles barely protruding through the tumulus of dirty-looking salt. The salt used is imported from France; there is no stint of it, and not a moment is lost in applying it to the preservation of the fish. The pilchards lie in these heaps for a greater or less period, awaiting the convenience of the owner to be packed; but if they lie in this state long, the oil will begin to exude from them, and is carefully drawn off into tanks, as it forms a profitable part of the merchandise of the fisherman. After a certain time they are neatly packed in casks or hogsheads, and are then subjected to a heavy pressure, under which the oil flows out abundantly through holes pierced in the bottom of the cask, each hogshead of pilchards producing on the average about four gallons of the oil. When the oil has finally ceased to flow, the casks are headed up, and ready—for what?

Ah! that's the question. How is it that, with fifty millions of pilchards a year caught on the Cornish coast, there is no such thing as getting a decent pilchard here in London, and still less in the provinces, and the hard-living industrial districts of the north, where they would be so valuable and might be had so cheap? We know no other reason than the silly prejudice which our island poor entertain against fish as an article of diet; and we are driven to the conclusion that it must be prejudice, and nothing more, which condemns the pilchards, to the amount of twenty to thirty thousand hogsheads a year, to be consigned, not to the home market, for whose use a bountiful Providence seems to have intended them, but for exportation to the shores of the Mediterranean, to furnish forth the tables of the rich and the poor alike of Roman Catholic countries.

Just look at the economy of this strange proceeding. The price of pilchards, picked and packed ready for transport anywhere, averages, it is said, about fifty shillings the hogshead; a hogshead may be taken to contain about three thousand fish; this is at the rate of sixty for a shilling, or five for a penny: two of them make a capital breakfast; and twice two, one would think, would form an agreeable variation, once a week or so, in lieu of such procurable mutton or beef as the labouring man can afford to eat; and they would not cost him a penny. Yet, to find a market for such relishing viands, the Cornish fisherman is obliged to send them thousands of miles, to countries where labour of all kinds is notoriously cheap, and to compete with provisions at lower prices than are ever heard of at home. Oddly enough, we import sardines, cupelins, and other savourless and worthless fish, from the same coasts to which we send our pilchards, and pay high prices for them; the pilchard being a fish of incomparably finer flavour than any which we get in return at seven times the cost!

The above details have reference only to St. Ives, on the northern coast of Cornwall, which annually supplies the larger portion of the pil-

chards exported to the foreign markets. But pilchards are caught, though in less numbers, on various parts of the coast, not only of Cornwall, but of Devon. The catch at other stations rarely equals that at St. Ives, whose bay forms a sort of natural trap, by entering which the fish wonderfully diminish the labour of their captors. When the fishery is carried on at a distance from land, it is rarely, if ever, so productive as the inshore bay fishing, and it would not repay the large investment of capital which makes the latter, in prosperous seasons, so remunerative. The deep-sea fishing is, for the most part, carried on by means of drift or driving nets, in common fishing-boats, manned by crews of four or five only, and propelled by a low lug sail. These boats co-operate together, uniting their nets, to the extent sometimes of nearly a mile in length, and sharing the proceeds of the catch according to the length of each boat's netting. They have, of course, to dispense with the assistance of the huers, and trust to the fortune of the sea. The produce of their labour cannot be conveyed to shore in carrying-boats similar to those of the bay fishers, but are transported thither in fast-sailing sloops of a few tons burthen. The fish thus caught principally supply the home market, and, being sold at a low rate, find their way in greater or less abundance to the dwellings of the poorest classes throughout Cornwall, who well know their value, and who, if need be, can salt and preserve them with their own hands.

The pilchard fishery has, during the last century, undergone many and considerable mutations. Eighty or ninety years ago pilchards were to be caught in abundance all along the coast from St. Ives northward and southward, from the end of July up to Christmas or the new year, and furnished constant employment to the fishermen for a season of five to six months' duration. At that time the festive toast of Cornishmen was, "Fish, tin, and copper"—a combination sufficiently suggestive of the importance of the trade in pilchards. Now the season endures but two or three months, and even this short period is frequently marked by intervals of total inaction; and it has happened in some years that the pilchards have appeared but for a few days during the whole season.

More than a century ago, a prosperous pilchard fishery was carried on in Bantry Bay, on the coast of Ireland; but its operations were put an end to by the French fishermen, who, by the use of immense drift nets, shut out the fish from the inland creeks and bays, and destroyed the gains of the Irish, who, by way of reprisal, made a night raid upon the nets of the aggressors, and put an end to their fishing as well.

The advantage of the pilchard fishery to Cornwall, needs no pointing out. As a profitable investment of capital to a large amount—for there are two hundred seines at St. Ives alone, and each seine costs from three to four hundred pounds—it must yield employment to a large number of hands. Some idea of the wages paid may be gathered from the fact that, in a prosperous season, as many as twenty thousand hogsheads of fish will be caught in the seines, and taken out of the bay in the course of a single week. These fish are valued at twenty shillings the hogshead

when taken out of the water, and they are made worth fifty shillings the hogshead by the labour applied in curing, bulking, and barreling them—allowing a large margin, it will be perceived, for the payment of wages, which on these occasions are always on a liberal and ungrudging scale. Add to this the abundance of relishing, wholesome food poured into every poor man's dwelling in preparation for a time when food is most wanted; and add again the value of the refuse mixture of salt and spoiled fish which, under the name of *man*, is finally collected and sold as manure for the land; and we get a proximate notion of the obligation our good friends in Cornwall are under to poor little pilchard, who so multitudinously surrenders himself to their service. We wish we could add, that the population of our island had grown wise enough to accept the entire produce of the fisheries, and our own industrious poor benefited by the harvests reaped on their coasts.

Of the natural history of the pilchard not very much appears to be known. On the authority of Pennant, it was for a long time taken for granted that, like the herring, the pilchard migrated to the far north, and appeared only at stated seasons on our shores. Recent observations, however, seem to show that what was assumed of the herring was not the fact, and that neither herring nor pilchard do migrate far, but merely retire at stated seasons to the bottom of the sea in deep waters, returning to the surface, by an instinct which we must recognise as providential, when they are in that condition which is most appropriate for human food. In confirmation of this opinion, the pilchard (we cannot speak with regard to the herring), at those seasons when it is of no use to fish for him, is constantly found in the stomachs of larger and more ravenous fishes caught off the same coasts. Unlike the herring, the pilchard has no teeth; his back is of a bluish green, his belly of a silvery white, and his head of a golden yellow.

THE VEXATIONS OF AN AUTHOR.

"Come like shadows, so depart."

It was some years ago my misfortune, or rather my folly, to imagine that I could write a book; and so, one evil day, I unhappily dipped my pen in literary ink, and, after wasting much time and paper, I composed what I mistook for a very readable and meritorious work, entitled "Shadows," which, although it was but a little one, proved to me a large source of mortification and vexation.

Well, when completed, I sent my MS. copy to the printer, very carefully written and punctuated, that there might be no errata to throw "a shadow" upon my graphical or grammatical ability; but, alas! on receiving a fair copy of my literary offspring, I was grievously disappointed. I had desired to have the title and pages ornamented by a neat ruled border; but the printer had omitted this "line of beauty," and it was bare and bald. Nevertheless, I looked at the little bantling with great fondness and delight, anticipating that the public would feel the same, and no doubt award me the bays; for in my fond eyes it appeared a gem.

Like a child with a new toy, I sat down and read my production many times over in ecstasy,

and "sighed and looked, and sighed again." Thus employed, I became so excited, that at night "balmy sleep" refused its refreshing office, and I lay awake, indulging in delicious visions of future editions, and of the urging of publishers to print, print, print, as well as of golden offers for the future employment of my successful pen! I also congratulated myself that I had not sold the copyright, so that I was free of my publisher "to do what I liked with my own," and all the profit was to be mine.

Rising the next morning, I sat down gaily to write to my publisher and printer, remitting to the latter the amount of his bill for paper and printing, in the pleasing hope that very soon the former would be remitting to me.

Now came my trials—*literary* shall I call them? *literal* they certainly were! I had directed a portion of the books to be sent to me, to meet the expected demands of my personal friends, and I occupied myself in sending presentation copies to many of them, inclosing a note to each, delicately intimating how acceptable would be their kind patronage thereof. In deep anxiety I waited the replies, especially from those who lived in the vicinity. Soon one very kind and flattering letter arrived from a dear friend, inclosing an order (and the money, too) for several copies! I cannot say how many times I read that precious letter; and it was not long before away went the books at steam speed. Day after day rolled on, but no more orders arrived, until one morning the postman brought me a letter. It was from an eminent physician, and in which, after an apology for not earlier thanking me for my book, he added, "I suppose the writing of it has afforded you some amusement!" This I thought was a clever cut, but more like an operating surgeon than a healing physician. In a few days after this, another friend wrote that he supposed "I had kindly intended it for his little boy, who was much pleased with it!" Another complimented me in the highest terms for its literary merit, but so entirely mistook the subject, that it was very doubtful if he had even read the title-page. Another wrote from London to the effect, that it was so exceedingly interesting, that he should send immediately to the publishers for a large number of copies, to distribute among his friends; but, alas! as will be seen hereafter, I had only the advantage of the promise.

Many other curious letters and singular remarks I received from others, who so kindly honoured me by accepting my presentation copies. One, I remember, did me the favour of preventing a friend of his from purchasing one, by giving him the copy he had accepted from me. A lady one day expressed to me her delight at a copy she had seen, and requested to know where she could purchase one; just as if it was only sold in some mysterious place, or by some obscure dealer in marine stores. Another, in complimenting me as the author of "The Shades" (for so she persisted in calling it), said she remembered her dear father, when he was in London, always went from the chop-house where he dined to "The Shades" at Old London Bridge, to take his pint of draught port wine from the wood, on account of its cheapness! This was indeed a climax. Only imagine

"the poet's eye in a fine phrenzy rolling," to hear his "Shadows" shadowed forth by the miserable cheap port of the Old Shades!

So much for my literary cum literal mortifications from my friends.

Patiently—no, rather impatiently—did I await letters from my London publisher, with a remittance and a notice for reprinting another edition. A week, a month, a quarter, a half year passed away. Surely, I thought, he must have sold all, and neglected to advise me thereof; so I nervously wrote to jog his memory, intimating also that a remittance would be most acceptable, as at present it was on my part all outlay, and my pocket greatly needed an *inlay*. In reply to this came a cool business-like letter, containing an account of charges for advertisements, etc., etc., etc. This was the debit side; on the credit side was—"to be, or (ought) to be"—the amount for copies sold. Now it is well known that London contains a population of over 2,000,000. Was it extravagant in me to calculate that 1 in every 25,000 would purchase a copy? Why, I had, or thought I had, more than that number of personal friends residing there; so I made sure that my very modest expectation would be exceeded rather than disappointed, and I wrote the publisher to request he would take the amount of his charges from the proceeds of the copies sold, and remit me the balance. To this he replied, very dexterously, that unfortunately he had not sold one copy, and requested to know what I would wish to have done with them. Here I must do him the justice to acknowledge that he had urgently advised me to allow him to advertise them effectively in the reviews, magazines, etc., etc.; but my modesty, or my means, or both, prevented me. So I paid his bill, and gave another bookselling house an order for the lot (two hundred and fifty), to dispose of them as they best could.

After waiting another twelve months, the traveller of the latter house called on me, took his dinner, and then paid me one sovereign on account, but produced no statement of the number sold. Another twelve months passed away, when the same traveller paid me a second visit, and ate a second dinner, but brought me no second sovereign, having "no orders on the subject."

Thus I fear my literary misfortunes are not yet ended, although my mortifications may be at their ultima, and my "Shadows" have certainly proved very unsubstantial. I have therefore to decide what to do with my remaining copies, which are like Cassim's slippers—always boding me fresh mischief; for if I suffer them to remain, they may be accumulating fresh charges; or if I remove them, they are sure to bring down a bill with them, and of course railway expenses.

May my troubles prove a warning to any of my readers who may be afflicted with the *cacoethes scribendi*.

THE LAST MOMENTS OF REV. EDWARD BICKERSTETH.

IN Mr. Bickersteth's case was eminently fulfilled the declaration that "godliness" hath "the promise of the life that now is, and of that which is to come." In early life he had reproached himself with indulging a day-dream, in forming schemes of happiness from

temporal pleasures, such as having a large library, an independent fortune, and leisure and quietness, because in the situation in which he then was, it was unlikely he should ever enjoy them without sacrificing duty; yet this forbidden day-dream is almost a sketch of the years of freedom from worldly anxiety spent in his happy, quiet rectory at Watton. His mouth was filled with joy and praise; he received all as from a Father's hands, and a text so constantly on his lips as to be almost associated with his memory by those who knew him best, was, "Who giveth us richly all things to enjoy."

However willingly the spirit might labour in the cause of Christ, unwearied exertion told at last even upon his vigorous constitution. In 1841 he had a paralytic stroke, but it was slight, and a short cessation from work sufficed to remove any alarming symptoms. At the end of January, 1850, an unusual languor alarmed his friends, and on the first Sunday in February he was found before breakfast stretched insensible over the chairs in his study. He survived till the end of the month. Even to the last, hope was scarcely relinquished, and conversation was almost forbidden, as much depended on the greatest quietness. There were many seasons also of mental wandering, more or less partial; yet enough passed in that month of weakness to set a solemn deathbed seal on all his past experience. "What a comfort it is," he said, soon after his seizure, "not to have a salvation to seek now! I can enjoy a salvation found; I know whom I have believed. The gospel is a reality. I find it to be so now." And again, after an interval, "Salvation sought is with fear and trembling; salvation found is always ready." When asked for a message to his absent children, "Say I am very happy in God's love." On his son once asking him how he felt, he said, "Pretty well; the visions of glory have been quite indescribable. Eye hath not seen, nor ear heard, neither hath it entered the heart of man to conceive the good things God hath prepared for them that love him. All the images of revelation fall far short of the reality." At one time, when every word was an effort, "I have no confidence in any goodness or merit of my own; I place my whole trust in the Lord Jesus Christ." To his medical man he said, "I find all my principles confirmed by my last hours; I have believed in the Lord Jesus Christ, and he supports me now."

His death was indeed the sinking asleep of one who longed for rest. On the morning of February 28th a change was perceived in his breathing; he gave no sign of recognition through the day, though his family were gathered around his bed, but his eye was clear, and bright, and calm; it seemed as if the spirit, in holy expectation, were waiting each moment for its summons to the presence of the Saviour. At five o'clock in the afternoon the breathing ceased so gently, that those around scarcely knew the moment when he departed to be with the Lord.

If his history have awakened in the minds of any a desire for a life so useful, and a death so happy, let it stir them up to follow his bright example in habits of early devotion; for was it not to the prayers offered up, sometimes in hours stolen from sleep in his chamber in Hutton Court, that he owed his rapid growth in youthful piety, and the continual opening of fresh doors of usefulness, leading at length to the wide-spreading blessings which marked his later years? It was one of his deathbed sayings, "No prayers are lost; they are lasting and living things."^{*}

* From a small and useful biographical tract, "Edward Bickersteth," by his daughter, just published by the Religious Tract Society, and admirably adapted as a present to young men and others.